

## United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/814,901	03/31/2004	Hisashi Kayukawa	600791-7US (ZUS03-027TAE)	7603	
570	7590 07/20/2006		EXAM	INER	
AKIN GUMP STRAUSS HAUER & FELD L.L.P.			RIVELL,	RIVELL, JOHN A	
	ERCE SQUARE ET STREET, SUITE 22	00	ART UNIT	PAPER NUMBER	
	HIA, PA 19103		3753		

DATE MAILED: 07/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
Office Action Commons	10/814,901	KAYUKAWA, HISASHI				
Office Action Summary	Examiner	Art Unit				
	John Rivell	3753				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status ·						
1) Responsive to communication(s) filed on 3/21/6	04 (application)					
,	, <del></del>					
closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
4)⊠ Claim(s) <u>1-58</u> is/are pending in the application.						
4a) Of the above claim(s) is/are withdrawn from consideration.						
· · · · · · · · · · · · · · · · · · ·						
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1-7,13-17,19-23,26-31,34-40,43-50 and 53-58</u> is/are rejected.						
7) Claim(s) <u>8-12,18,24,25,32,33,41,42,51 and 52</u> is/are objected to.						
8) Claim(s) are subject to restriction and/or election requirement.						
Application Papers						
9) The specification is objected to by the Examiner.						
10)⊠ The drawing(s) filed on <u>21 March 2004</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>						
Attachment(s)						
1) X Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	4) Interview Summary Paper No(s)/Mail Da					
Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)   Paper No(s)/Mail Date 03312004, 09272004.		atent Application (PTO-152)				

Claims 1-58 are pending.

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 3, 4, 5, 6, 7, 22, 23, 30, 31 and 39 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 4, 5, 6, 7, 8, respectively, of copending Application No. 10/813,929.

Although the conflicting claim are not identical, they are not patentably distinct from each other because the more specific copending application claims, include all of the instant claimed elements of the instant application claims. That is, the more specific copending claims are considered to be a "species" of the broader instant application claims. Thus the "generic" invention here, of the broader instant application claims is "anticipated" by the more specific copending application claims which include all of the instantly claimed features. See for example, *In re Goodman* 29 USPQ2d 2010.

Claims 15, 16 and 17 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 4, 6 and 8, respectively, of copending Application No. 10/813,929 in view of Richards.

The device of the respective more specific copending application claims discloses all the claimed features with the exception of having "the core body... positioning abutment... formed on an outer face thereof so as to extend sidewise relative to a portion of the core body with which the cylindrical sealing member is fitted, the body positioning abutment being butted against the inner wall of the throughbore in a direction of insertion into the throughbore".

The patent to Richards discloses that it is known in the art to employ a "core body (23 that) has a body positioning abutment (explicitly illustrated in fig. 6 at the corner edge of core 23 abutting the inner surface 17) which is formed on an outer face thereof so as to extend sidewise relative to a portion of the core body (23) with which the cylindrical sealing member (18) is fitted, the body positioning abutment being butted against the inner wall (17) of the throughbore in a direction of insertion into the throughbore" for the purpose of providing an additional metal to metal seal around the outside of the inserted core body.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to employ in the devices of the respective copending application claims, "a body positioning abutment which is formed on an outer face thereof so as to extend sidewise relative to a portion of the core body with which the cylindrical sealing member is fitted, the body positioning abutment being butted against

the inner wall of the throughbore in a direction of insertion into the throughbore" for the purpose of providing an additional metal to metal seal around the outside of the inserted core body as recognized by Richards.

Claims 49 and 50 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 4 and 6, respectively, of copending Application No. 10/813,929 in view of Lutz.

The device of the respective more specific copending application claims discloses all the claimed features with the exception of having "both the valve core and the plug (include) a pair of faces respectively formed parallel to each other, and the inner sealing member is disposed between said pair of faces".

The patent to Lutz discloses that it is known in the art to employ "both the valve core (at 2) and the plug (at seal 14 having) a pair of faces respectively formed parallel to each other" for the purpose of forming a fluid tight closure between the valve head and seat. Compared to the head and seat surfaces of Richards, the differences are seen as full functional equivalents of each other.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to employ in the device of the respective copending application claims parallel head and seat surfaces mating with each other to form a fluid tight closure for the purpose of forming a fluid tight closure between the valve head and seat as recognized by Lutz.

The above are provisional obviousness-type double patenting rejections.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 5, 6, 13, 14, 28, 29, 31, 34, 37, 38, 40, 43 and 46 are rejected under 35 U.S.C. §102 (b) as being anticipated by Richards.

The patent to Richards, in figures 5 and 6 for example, discloses a "valve core (at 23) for opening and closing a core mounting throughbore, comprising: a cylindrical core body (23) fixed inside the throughbore and having a distal opening; a moving shaft (stem 15) inserted through the core body (23) so as to be directly moved and having an end; a plug (at 16) formed integrally at the end side of the moving shaft (15) so as to open and close the distal opening of the core body (23); a biasing member (spring 20) biasing the moving shaft (15) so that the distal opening of the core body (23) is closed by the plug (16); a cylindrical sealing member (18); an outer sealing portion (the outer peripheral left end of seal 18) formed integrally on the cylindrical sealing member and fitted (for example, stretched over the open end of element 23) with the outer periphery of the core body (23) so as to be held between the core body (23) and the inner wall (at 17) of the throughbore thereby to adhere closely to the outer periphery of the core body (23); and an inner sealing portion (the right end of seal 18 in contact with valve head 16) formed integrally on the cylindrical sealing member (18) so as to adhere closely to an outer face (21) of the plug (16)" when seated, as recited in claim 1.

Regarding claim 2, in Richards, "the inner sealing portion protrudes forward (i.e. downstream) from an end of the core body (23)" as recited.

Regarding claims 5 and 6, in Richards, "the cylindrical sealing member (18) is rotatably fitted with the core body (23)" when stretched over the end of body 23, as recited.

Regarding claims 13 and 14, in Richards, "the core body (23) has a body positioning abutment (the square edged corner of element 23 abutting the inner surface 17 as explicitly illustrated in fig. 6) which is formed on an outer face thereof so as to extend sidewise relative to a portion of the core body (23) with which the cylindrical sealing member (18) is fitted, the body positioning abutment being butted against the inner wall (17) of the throughbore in a direction of insertion into the throughbore" as recited.

Regarding claims 28, 29, 31 and 34, in Richards, "the biasing member (20) comprises a compression coil spring inserted into a portion of the moving shaft (15) protruding outward from the core body (23) so as to be compressed between a spring stopper (22) formed integrally with the end of the moving shaft (15) and the end (11) of the core body (23)" as recited.

Regarding claims 37, 38, 40, 43 and 46, in Richards, "the core body (23), the moving shaft (15), the cylindrical sealing member (18) and an elastic member (20) serving as the biasing member are formed into four discrete parts" as recited.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

<sup>(</sup>a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 19, 20, 21, 26, 27, 35, 36, 44 and 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Richards in view of Zabel, Jr.

The patent to Richards discloses all the claimed features, as noted above, with the exception of having "the cylindrical sealing member... butted against a stepped portion between a portion of the core body with which the cylindrical sealing member is fitted and the body positioning abutment" (claims 19 and 20).

The patent to Zabel, Jr. discloses that it is known in the art to employ a "cylindrical seal" at seal element 13 attached to upper core body 3 by a mortise and tenon type of connection for the purpose of removably attaching the lower seal element to the valve core body.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to employ in Richards, a mortise and tenon type connection between the lower cylindrical seal element and the valve core body for the purpose of removably attaching the lower seal element to the valve core body as recognized by Zabel, Jr.

Further regarding claims 19, 20, 21, 26 and 27 in Richards, "the cylindrical sealing member (18) includes a larger diameter portion (at the left end stretched over the open end of core 23) and a smaller diameter portion (at the downstream right end of seal 18) both arranged axially, the core body (23) is fitted in the larger diameter portion" as recited.

Regarding claims 35 and 36, in Richards, "the biasing member (20) comprises a compression coil spring inserted into a portion of the moving shaft (15) protruding outward from the core body (23) so as to be compressed between a spring stopper (22)

Application/Control Number: 10/814,901

Art Unit: 3753

formed integrally with the end of the moving shaft (15) and the end of the core body (at 11)" as recited.

Regarding claims 44 and 45, in Richards, "the core body (23), the moving shaft (15), the cylindrical sealing member (18) and an elastic member (20) serving as the biasing member are formed into four discrete parts" as recited.

Claims 47, 48 and 53-58 are rejected under 35 U.S.C. 103(a) as being unpatentable over Richards in view of Lutz.

The patent to Richards discloses all the claimed features with the exception of having "both the valve core and the plug (including) a pair of faces respectively formed parallel to each other".

The patent to Lutz discloses that it is known in the art to employ "both the valve core (at 2) and the plug (at seal 14 having) a pair of faces respectively formed parallel to each other" for the purpose of forming a fluid tight closure between the valve head and seat. Compared to the head and seat surfaces of Richards, the differences are seen as full functional equivalents of each other.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to employ in Richards parallel head and seat surfaces mating with each other to form a fluid tight closure for the purpose of forming a fluid tight closure between the valve head and seat as recognized by Lutz.

Regarding claim 59, in the device of the combination above, "the inner sealing portion (will have) a pair of end faces abutting the pair of faces respectively" as recited.

Claims 54 and 55 are rejected under 35 U.S.C. 103(a) as being unpatentable over Richards in view of Zabel, Jr., as applied to claims 19, 20, 21, 26, 27, 35, 36, 44 and 45 above, further in view of Lutz as applied to claims 47, 48 and 53-58 above.

Claims 8-12, 18, 24, 25, 32, 33, 41, 42, 51 and 52 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Applicant is reminded that a clear line of demarcation must be maintained between applications.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Rivell whose telephone number is (571) 272-4918. The examiner can normally be reached on Mon.-Thur. from 6:30am-5:00pm (EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eric Keasel can be reached on (571) 272-4929. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000/

Primary Examiner
Art Unit 3753